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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,195	10/02/2003	David Croop		9624

7590
R. Christian Macke
40 East 10th Street
Newport, KY 41071

12/29/2005

EXAMINER

MANAHAN, TODD E

ART UNIT PAPER NUMBER

3732

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,195

Applicant(s)

CROOP ET AL.

Examiner

Todd E. Manahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,8,9,11-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8,9,12-18 and 21 is/are rejected.
- 7) ☐ Claim(s) 11,19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “means for cutting off flow from said air supply hose and said water hose upon disengagement” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The use of the trademark VITON has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is indefinite because it appears to be reciting the same element of the invention as base claim 1. Claim 12 recites a “means for precise titration of air and water”. According to applicant’s disclose this means is the pushbutton air and water valves (page 20, lines 17-19) and thus is the same element as the “air valve means” and “water valve means” of base claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Detsch (United States Patent No. 4,629,425) in view of Gonser et al. (United States Patent No. 5,045,055).

Detsch discloses a dental mirror comprising an elongated handle; a reflective surface 104 affixed to a first end of the handle; means for communicating air through the handle to at least one air orifice 70 directing air at the reflective surface; means for communicating water through the handle to at least one water orifice 74 directing water at the reflective surface; an air valve 40 positioned on the handle for controlling air flow to the air orifice; and a water valve 50 positioned on the handle for controlling water flow to the water orifice. The reflective surface is attached to the handle by means of an externally threaded screw and an internally threaded sleeve. Detsch does not disclose the valve means as being field replaceable valves. Gonser et al. disclose a dental handpiece having field replaceable pushbutton valves for the air and water lines so that the dentist can replace the valves and O-rings at the office (see col. 6, lines 24-53). The O-rings are autoclavable (Col. 6, lines 16-21). It would have been obvious to one skilled in the art to provide the device of Detsch with field replaceable valves as the valve means as disclosed by Gonser et al. in order to permit the dentist to readily replace worn O-rings and valves in the office setting. With regard to claim 13, note figure 1 of Detsch showing the valves linearly offset and the air and water lines not overlapping. Regarding claims 14 and 15, Gonser et al disclose use of a quick disconnect coupling which includes means for cutting off flow from said air supply hose and said water hose upon disengagement (see col. 4, lines 9-64). It would have been further obvious to one skilled in the art to provide the device of Detsch with a quick disconnect coupling as taught by Gonser et al. in order to permit the mirror to be quickly removed from the hose assembly. Regarding claim 16, the handle of Detsch includes a removable valve body section 34 (see col. 4, lines 25-58). Regarding claim 17, Gonser et al. hold the valves in the handpiece via set screws, which constitute "retaining pins".

Claims 5, 8, 9, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Detsch in view of Gonser et al. as applied to claim 1 above, and further in view of Johnston (United States Patent No. 2,984,909).

Johnston discloses a dental mirror attached to a fluid supply having means 73,69 for aligning the mirror with respect to the handle and the fluid nozzle (see col. 2, lines 25-36) and preventing rotational translation relative thereto. To provide the mirror of the combination of Detsch as modified by Gonser et al. with means for aligning the mirror with the fluid nozzle and hence the push button valves, would have been obvious in view of Johnston in order to assure proper alignment of the mirror with the nozzles for effective cleaning thereof. Regarding claim 9, Freedman discloses a clamp 71 which prevents longitudinal translation of the mirror relative to the handle.

Response to Amendment

The affidavits under 37 CFR 1.132 filed 20 June 2005 is insufficient to overcome the rejection of claims 1, 2, 5, 8, 9, 13-18, and 21 based upon Detsch in view of Gonser et al. as set forth in the last Office action because: The affidavits assert a long felt need for a dental mirror having air and water ports to assist in keeping it clean. As set forth in MPEP 716.04, the long felt need must be recognized, persistent and not solved by others (see also *Newell Companies v. Kenney Mfg. Co.*, 864 F.2d 757, 768. 9 USPQ2d 1417, 1426 (Fed. Cir. 1988)). Though the problem of cleaning dental mirrors has long been, the problem has been solved by others using air and/or water. This is evidenced by prior art Patents No. 4,629,425; 3,048,924; 3,969,824; 3,986,266; 3,250,005; 3,342,178; 5,139,420; 5,951,284; 3,164,904; 2,984,009, and 3,001,288. Thus there was no longer a long felt need for a mirror having water and/or air ports to assist in

keeping it clean. The mere fact that the Declarants were unaware of such prior art does not mean that the prior art did not solve the stated problem.

Response to Arguments

Applicant's arguments filed 30 September 2005 have been fully considered but they are not persuasive.

In response to applicant's arguments that the rejection of claim 12 under 35 USC 112 is in error because the means for precise titration of air and water are not necessarily the air and water valves, it is to be noted that applicant's disclosure only states the air and water valves as the means for titration (see page 20, lines 17-29). No other means for titration are disclosed. As such claim 12 is claiming the same disclosed elements, namely the valves, as already claimed.

In response to applicant's arguments that the combination of Detsch and Gonser et al. would result in the large valve block of Gonser et al. to be located on the end of the device of Detsch, such would not be the case. The device of Detsch already has a valve block 34. The proposed obvious modification made by the examiner was not to replace the valve block, but rather to replace the valves of Detsch with field replaceable valves as disclosed by Gonser et al. as such, the field replaceable valves of the resultant device would be located in the same place the original valves are in the device of Detsch, which are "incorporated within the elongated handle.

With respect to applicant's arguments that the device of Gonser et al. is not autoclavable, it is noted that the o-rings of Gonser et al. are made of VITON which is the same material used by applicant for the o-ring (see applicant's specification, page 27, lines 11-13) and thus it would

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have the same properties as applicants, i.e. the ability to withstand high temperatures and high pressures.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the push buttons being positioned to allow the user's thumb to naturally engage them) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regard to applicant's arguments that the set screws of Gonser et al. are "functionally distinct" from the retaining pins claimed by applicant, such does not appear to be the case. The set screws of Gonser serve the same function as applicant's retaining pins, namely holding the valves in place in the valve block.

Allowable Subject Matter

Claims 11 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

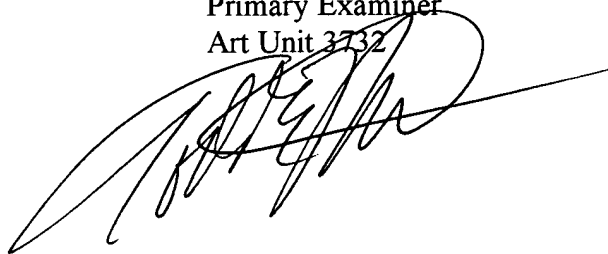
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd E. Manahan whose telephone number is 571 272- 4713. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571 273-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Todd E. Manahan
Primary Examiner
Art Unit 3732

T.E. Manahan
23 December 2005

A handwritten signature in black ink, appearing to read 'T.E. Manahan', is written over the printed name and title of the examiner.